

1. A system for correlating crime incidents with the location of a subject, comprising in combination:

crime incident data containing information about the location and time of at least one crime;

subject location data containing information about the locations at various times of a plurality of subjects;

correlation computer including a correlation database;

means for supplying said crime incident data to said correlation database of said correlation computer;

means for supplying said subject location data to said correlation database said correlation computer;

said correlation computer including means for correlating said crime incident data and said subject location data to determine if each of said subjects are likely suspects of said crime based upon whether each of said subjects were proximate to said location of said crime at said time of said crime.

2. The system as set forth in Claim 1, wherein said crime incident data includes crime incident dispatch data obtained from a computer-aided dispatch system.

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3. The system as set forth in Claims 1 or 2, wherein said crime incident data includes crime incident investigative data obtained a from record management system.

4. The system as set forth in Claims 1, 2 or 3, further comprising in combination:

historical subject data such as sentencing, demographics and criminal history obtained from an information management system;

means for supplying said historical subject data to said correlation database of said correlation computer;

said correlation computer further including means for correlating said historical subject data with said crime incident data and said subject location data to determine whether said likely suspects of said crime are historically likely to have committed said crime based upon said historical subject data of said likely suspects.

5. The system as set forth in Claims 1, 2, 3 or 4, wherein said subject location data containing information about the locations at various times of a plurality of subjects is obtained from at least one of a house arrest location system, a location recording system employing a positioning system, a continuous location monitoring system employing a frequency triangular location system, voice

recognition with caller identification system, or a cellular triangular location system.

~~SUB A27~~ 6. The system as set forth in Claims 1, 2, 3, 4 or 5, wherein said correlation computer further includes means for producing correlation queries based upon predetermined criteria.

7. The system as set forth in Claims 1, 2, 3, 4 or 5, wherein said correlation computer further includes means for producing correlation queries based upon selective criteria.

8. The system as set forth in Claims 6 or 7, wherein said correlation computer further includes means for producing correlation reports based upon said correlation queries.

9. The system as set forth in Claim 5, wherein said location recording system, comprises in combination:

a body-worn case with a tamper resistant seal for connection to said subject, said case containing

a battery compartment allowing replacement of a battery contained therein without removal of said case from said subject,

means for charging said battery,

a location positioning system, and

a transmitter for transmitting position information from said location positioning system; and

a residence interface system including means for receiving said position information from said location positioning system and means for providing said position information to form a part of said subject location data.

10. The system as set forth in Claim 9, wherein said charging means comprises a swinging power generator incorporated into said case for charging said battery upon being swung.

11. The system as set forth in Claim 9, wherein said charging means comprises a solar cell mounted relative to said case.

12. The system as set forth in Claim 9, wherein said case is in the form to be worn on the subject's wrist.

13. The system as set forth in Claim 9, further including means for providing dead reckoning information to said location positioning system.

14. The system as set forth in Claim 9, wherein said transmitter for transmitting position information from said location positioning system comprises an infrared transmitter and wherein said means for receiving said

position information from said location positioning system comprises an infrared receiver.

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15. The system as set forth in Claims 1, 2, 3, 4, 5, 6, 7, 8 or 9, wherein said subject location data containing information about the locations at various times of a plurality of subjects further includes tampering data containing information about tampering and wherein said correlation computer further including means for correlating said tampering data with said crime incident data to determine whether said likely suspects of said crime are more likely to have committed said crime based upon said tampering data.

16. The system as set forth in Claims 1, 2, 3, 4, 5, 6, 7, 8, 9 or 15, wherein said subject location data further includes unknown location data indicative of undeterminable locations of said subjects at various times wherein said correlation computer further including means for correlating said unknown location data with said crime incident data to determine whether said likely suspects of said crime are more likely to have committed said crime based upon said unknown position data.

17. The system as set forth in Claims 7 or 8, wherein said crime incident data contains multiple crime incident

data about the location and time of a plurality of crimes and wherein said selective criteria of said correlation queries includes said multiple crime incident data.

18. The system as set forth in Claim 17, wherein said selective criteria includes for each crime incident, a date or range of dates, a time period, a crime incident identification and buffer distance around crime incident location.

SUB A4 19. The system as set forth in Claims 7 or 8, wherein said selective criteria of said correlation queries includes a date or range of dates, a time period and subject identification.

20. The system as set forth in Claims 7 or 8, wherein said subject location data contains exclusion zone data defining a zone of exclusion and wherein said selective criteria of said correlation queries includes said exclusion zone data.

21. The system as set forth in Claim 20, wherein said selective criteria includes a date or range of dates, a time period, subject identification, exclusion location, buffer distance and loiter time.

SUB A5 22. The system as set forth in Claims 7 or 8, wherein said selective criteria includes a crime incident map based

upon a date or range of dates, a time period, a type of crime and a buffer distance.

23. The system as set forth in Claims 7 or 8, wherein said selective criteria includes frequent locations of said subject based upon a date or range of dates, a time period, subject identification, buffer distance, loiter time and frequency.

24. The system as set forth in Claims 7 or 8, wherein said selective criteria includes loitering locations based upon a date or range of dates, a time period, buffer distance and loiter time.

25. The system as set forth in Claims 7 or 8, wherein said selective criteria includes clustering locations based upon a date or range of dates, a time period, buffer distance and cluster time.

26. A system to correlate crime incidents with a subject's location using crime incident data and an electronic apparatus means for locating the subject.

27. A system to correlate crime incidents with a subject's location using crime incident data and a non-removable, tamper resistant, body worn subject location recording device for use in a communications system, the body worn location recording device determining its own

spatial coordinates, conveying its spatial coordinates to a central database system, the body worn location recording device comprising a housing enclosing:

a means to detect tampering with the body worn location recording device,

a location means for determining the spatial coordinates of the body worn location recording device,

memory and a processor for use with algorithms to generate instructional commands to an offender, store spatial coordinates, transfer stored spatial coordinates to said central data base system, accept commands and data from a central database facility and monitor health and status of said location recording device,

a means to communicate using infrared wireless communications to a central data base system using an infrared transceiver attached to a wide area communications network,

a means to communicate using circuit switched connection oriented digital and analog wireless signals with the central data base system, and

a means to communicate with the person wearing the body worn device or with the portable tracking device.



~~28.~~ A location recording system, comprises in combination:

a body-worn case with a tamper resistant seal for connection to a subject, said case containing

a battery compartment allowing replacement of a battery contained therein without removal of said case from said subject,

means for charging said battery,

a location positioning system for producing subject location data, and

a transmitter for transmitting subject location data from said location positioning system; and

a residence interface system including means for receiving said subject location data from said location positioning system and means for providing said subject location data to a monitoring system.

29. The system as set forth in Claim 28, wherein said charging means comprises a swinging power generator incorporated into said case for charging said battery upon being swung.

30. The system as set forth in Claim 28, wherein said charging means comprises a solar cell mounted relative to said case.

31. The system as set forth in Claim 28, wherein said case is in the form to be worn on the subject's wrist.

32. The system as set forth in Claim 28, further including means for providing dead reckoning information to said monitoring system.

33. The system as set forth in Claim 28, wherein said transmitter for transmitting said subject location data from said location positioning system comprises an infrared transmitter and wherein said means for receiving said subject location data from said location positioning system comprises an infrared receiver.

34. The system as set forth in Claims 28, 29, 30, 31, 32 or 33, wherein said monitoring system comprises a system for correlating crime incidents with said subject location data including crime incident data containing information about the location and time of at least one crime and means for correlating said crime incident data and said subject location data to determine if each of said subjects are likely suspects of said crime based upon whether each of said subjects were proximate to said location of said crime at said time of said crime.

35. A method for correlating crime incidents with a subjects' location, comprising the steps of:

correlation computer including a correlation database;

means for supplying crime incident data to a correlation database;

means for supplying subject location data to said correlation database;

means for correlating said crime incident data and said subject location data to determine if each of said subjects are likely suspects of said crime based upon whether each of said subjects were proximate to said location of said crime at said time of said crime.

36. The method as set forth in Claim 35, wherein said crime incident data includes crime incident dispatch data obtained from a computer-aided dispatch system.

SUB A6> 37. The method as set forth in Claims 35 or 36, wherein said crime incident data includes crime incident investigative data obtained a from record management system.

38. The method as set forth in Claims 35, 36 or 37, further comprising the steps of:

means for supplying historical subject data to said correlation database;

means for correlating said historical subject data with said crime incident data and said subject location data

to determine whether said likely suspects of said crime are historically likely to have committed said crime based upon said historical subject data of said likely suspects.

<sup>39</sup>~~38~~. The method as set forth in Claims 35, 36, 37 or 38, wherein said subject location data containing information about the locations at various times of a plurality of subjects is obtained from at least one of a house arrest location system, a location recording system employing a positioning system, a continuous location monitoring system employing a frequency triangular location system, voice recognition with caller identification system, or a cellular triangular location system.

<sup>40</sup>~~39~~. The method as set forth in Claims 35, 36, 37, 38 or 39, further including means for producing correlation queries based upon predetermined criteria.

<sup>41</sup>~~40~~. The method as set forth in Claims 35, 36, 37, 38 or 39, further including means for producing correlation queries based upon selective criteria.

<sup>42</sup>~~41~~. The method as set forth in Claims 39 or 40, further including means for producing correlation reports based upon said correlation queries.

<sup>43</sup>~~42~~. The method as set forth in Claims 35, 36, 37, 38 or 39, 40 further including means for correlating tampering

data with said crime incident data to determine whether said likely suspects of said crime are more likely to have committed said crime based upon said tampering data.

44. The method as set forth in Claims 35, 36, 37, 38 39, 40 further including means for correlating unknown location data with said crime incident data to determine whether said likely suspects of said crime are more likely to have committed said crime based upon said unknown position data.

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